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IN THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently amended) A picture display device comprising

— a cathode ray tube (1) having an elongated display screen (8) with a long axis (24) and a short axis (22), a cone portion (3) whose cross-section has an elongated shape with a long axis and a short axis, a neck (4) comprising means (5) for generating at least one electron beam (6), and

— a deflection system (9) mounted on said cone portion (3) for generating electromagnetic fields for deflecting said electron beam(s) (6) in a line direction that is substantially parallel with said short axis and in a frame direction that is substantially parallel with said long axis.

~~characterized in that wherein the deflection system (9) is arranged to scan the electron beam(s) (6) along lines substantially parallel to the short axis (22) of the display screen (8), and in that the a part of the cone portion (3a) which is under the deflection system (9) has at least one cross-section whose internal outline has a long axis/short axis ratio (A_c) which is larger than or equal to the long axis/short axis ratio (A_{scr}) of the display screen (8).~~

2. (Currently amended) A picture display device as claimed in claim 1, ~~characterized in that wherein~~ the part of the cone portion (3a) which is under the deflection system (9) has at least one cross-section whose internal outline has a long axis/short axis ratio (A_c) which is larger than the long axis/short axis ratio (A_{scr}) of the display screen (8).

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3. (Currently amended) A picture display device as claimed in claim 2, ~~characterized in that wherein~~ $(A_c - 1)/(A_{scr} - 1) \geq 1$.

4. (Currently Amended) A picture display device as claimed in claim 2, ~~characterized in that wherein said electron beam(s) are deflected within a beam envelop the part of the cone portion (3) between the reference deflection plane (11) and that end of under the deflection system (9) which is nearest to the display screen (8) has a cross-section whose internal outline has a having a long axis/short axis ratio (A_c) (A_{el}) which first increases, goes through a maximum and then decreases.~~

5. (Currently amended) A picture display device as claimed in claim 1, ~~characterized in that wherein~~ $A_{scr} > 4/3$.

6. (Currently amended) A picture display device as claimed in claim 5, ~~characterized in that wherein~~ $A_{scr} \geq 16/9$.

7. (Currently amended) A picture display device as claimed in claim 1, ~~characterized in that wherein~~ the maximum deflection angle of the electron beam(s) (6) is larger than or equal to 120° .

8. (New) A display device comprising:

a cathode ray tube having a display screen with a long axis of length L_{scr} and a short axis of length S_{scr} , a cone portion, and a neck with means for generating an electron beam along a tube axis;

a deflection system on said cone portion for deflecting said electron beam in a line direction that is substantially parallel with said short axis and in a frame direction that is substantially parallel with said long axis;

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wherein said electron beam is scanned in a beam envelope within a plane that passes through said deflection system and that is substantially perpendicular to said tube axis such that said beam envelope has a short length S_{el} and a long length L_{el} ; and

wherein length $L_{el}/S_{el} > L_{scr}/S_{scr}$.

9. (New) A display device as claimed in claim 8 wherein a part of the cone portion under the deflection system has a cross-section with a long axis/short axis ratio(A_c) that is greater than A_{scr} , where $A_{scr} = L_{scr}/S_{scr}$.

10. (New) A display device as claimed in claim 9, wherein $(A_c - 1)/(A_{scr} - 1) \geq 1.1$.

11. (New) A display device as claimed in claim 8 wherein said electron beam is scanned to produce a plurality of beam envelopes such that L_{el}/S_{el} increases, goes through a maximum, and then decreases.

12. (New) A display device as claimed in claim 9 wherein $A_{scr} > 4/3$.

13. (New) A display device as claimed in claim 9 wherein $A_{scr} \geq 16/9$.

14. (New) A display device as claimed in claim 8 wherein said electron beam has a maximum deflection angle that is greater than or equal to 120° .

15. (New) A method of scanning comprising:
emitting an electrode beam from a neck of a display tube; and

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transpose scanning the emitted electron beam across a display screen of the display tube;

wherein the electron beam forms a beam envelop within the display tube that increases to a maximum and then decreases as the electron beam moves away from the neck.
